SEXUAL DIMORPHISM IN MALLADA TRAVIATA (BANKS) (NEUROPTERA: CHRYSOPIDAE)

S.L. WINTERTON

P.O. Box 25, Narangba, Brisbane, Qld 4504

Abstract

Sexual dimorphism is recorded in *Mallada traviata* Banks for the first time. Males display varying degrees of enlargement of the posterior half of the prothorax, a feature not found in females.

Introduction

Mallada Navás is the largest and most widely distributed genus of the Chrysopidae, with at least 122 described species world-wide (Brooks and Barnard 1990). In Australia it is represented by at least 12 species, of which 10 are endemic. Mallada traviata (Banks) is distributed along the east coast of Australia, as far south as the Australian Capital Territory (Winterton 1995). Although largely seasonal, it is the most abundant chrysopid in coastal areas of Queensland but scarce inland (Winterton, unpublished data). The biology of M. traviata is unknown although the larval stages were described by Boros (1984).

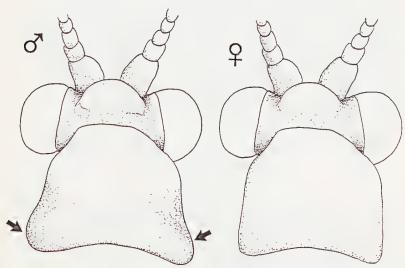


Fig. 1. *Mallada traviata* Banks, dorsal views of head and prothorax of male (left) and female (right).

Sexual Dimorphism

Sexual dimorphism is not common in the Chrysopidae, but has been recorded in 2 Australian species, namely *Mallada basalis* (Walker) and *M. signata*

(Schneider) (New 1980). In both species males have a distinctive thickening and/or shading of the forewing pterostigma, which are vibrated against the substrate during courtship. Dimorphism between sexes of certain nearctic species of *Meleoma* Fitch is dramatic with males developing large frontal processes (Garland 1985).

Mallada traviata males are distinguishable from females by a characteristic lateral enlargement of the posterior half of the prothorax, which in the female is not enlarged (Fig. 1). The degree of enlargement is variable between individuals and appears not to be related to either adult size or geographic variability. The range of prothoracic shape varies from the extreme form shown in figure 1 (left), to almost parallel-sided and similar to that of the female. The reason for this difference in prothoracic shape is unknown.

References

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